



PROPOSED TORQUAY HYDROELECTRIC POWER SCHEME BACKGROUND INFORMATION DOCUMENT



Environmental Assessment Practitioner	Enviroworks
Project Name	Construction of a Hydroelectric Power Scheme between the Farms Torquay 157, Portion 2, Tullochgorum 158 and Klipfontein 38, Portion 0, Orange River, Northern Cape Province.
Applicant	Sidala Energy Solutions (Pty) Ltd
DEA Reference Number	14/12/16/3/3/2/507
Enviroworks Reference:	Torquay Hydro
Document	Background Information Document
Date	24 July 2013

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Project Overview

Sidala Energy Solutions (Pty) Ltd is proposing the construction of a hydroelectric power scheme, to be located on the Orange River, Portion 2 of Farm Torquay 157 and Portion 0 of Farm Kruisfontein 38, and Tullochgorum 158 near Douglas, Northern Cape Province.

The motivating concept behind the development of hydroelectric power schemes is to reduce the costs of base-load, non-emitting renewable energy production from water resources so that it is less expensive than power generated through the use of fossil fuels. Once a hydroelectric complex is constructed, the project produces no direct waste, and has no output of carbon dioxide (CO²) than fossil fuel powered energy plants. The installation of a weir in a watercourse will result in a level of inundation of the surrounding banks upstream of the facility.

Such a facility comprises several aspects including the construction of:

- A weir in the river;
- A short canal with headrace, powerhouse and tailrace;
- An access road.

Hydroelectricity is a term used to refer to electricity generated through hydropower which employs the production of electrical power through the use of the gravitational force of falling or flowing water. When used in rivers, water coming from upstream is used for generation of electricity for a relatively small capacity of 10MW or less.

Currently in the planning stages of development, the applicant is in the stages of obtaining the relevant permits to commence with the intended extension. One of these is an Environmental Authorization from the National Department of Environmental Affairs.

To obtain such a permit, a Scoping and Full Environmental Impact Assessment is required to be undertaken, in order to ascertain whether the impacts of the proposed development on the affected environment are significant and can be effectively mitigated or reduced.



Typical view of the landscape at the site

The Environmental Impact Assessment Process

In the South African legislative framework, the National Environmental Management Act (NEMA) (No. 107 of 1998) regulates development activities which may pose a risk to the integrity of the ecological and human environment.

Coupled with NEMA, listed activities are given, which describe the types of development, limits, expanse and nature where an environmental impact assessment (EIA) will be needed. These are referred to as the NEMA 2010 EIA Regulations.

An initial review of the proposed development activity identified the following regulation and activity to be triggered:

No. & Date of Relevant Notice	Activity No.	Description of the activity
No. R. 544, 18 June 2010.	1. (i)	Construction of a facility generating less than 20MW of electricity.
No. R. 544, 18 June 2010	11. (v) (xi)	Construction of a weir and hydroelectric power facility in the watercourse.
No. R 544, 18 June 2010	18 (i)	Construction and establishment of a hydroelectric power facility on the banks of the Orange River.
No. R. 544, 18 June 2010	23 (ii)	Construction of a hydroelectric power facility along the Orange River on undeveloped land.
No. R. 545, 18 June 2010	15	Transformation of 20 hectares or more of undeveloped land.
No. R. 546, 18 June 2010	4	Construction of a road to provide access to the site.
No. R. 546, 18 June 2010	13	Site preparation and leveling to construct and install the facility in and adjacent to the river.

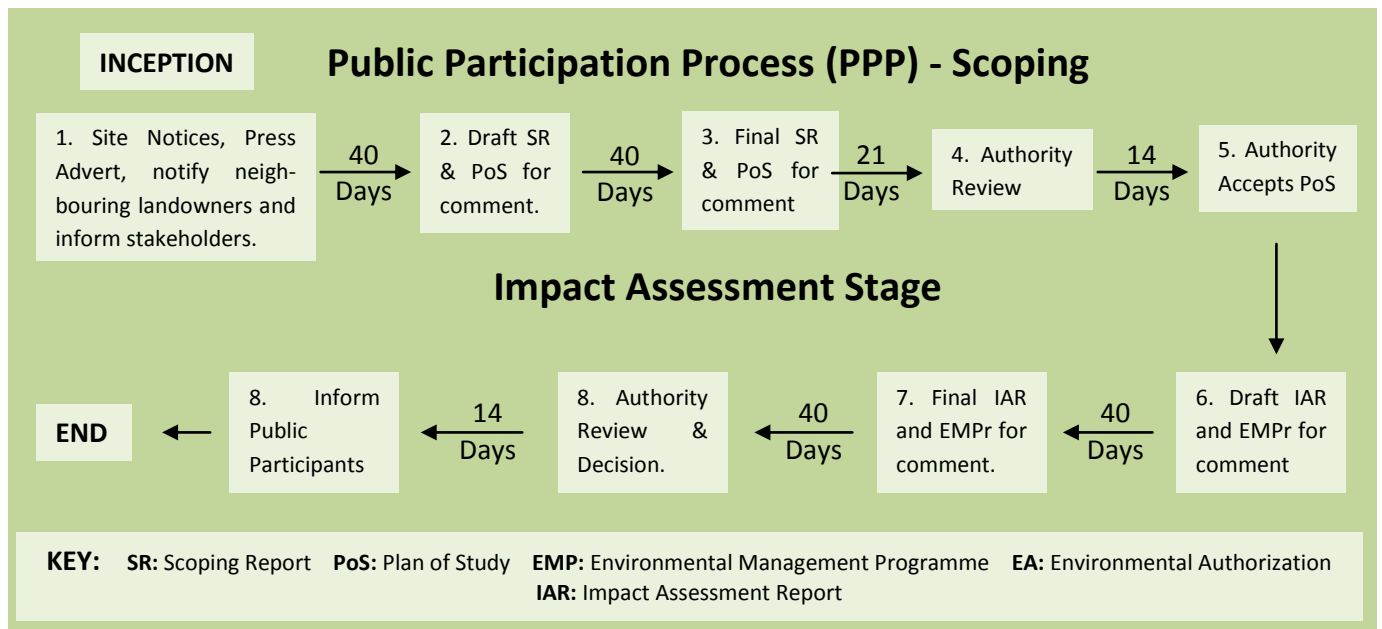
Enviroworks (An Independent Environmental Consultant) was appointed as the project Environmental Assessment Practitioners (EAP) to conduct a Scoping and Full Environmental Impact Assessment to address this impact of the proposed activity, which entails site surveys, a public participation process, stakeholder engagement, as well as impact rating and review.

Public Participation

For effectiveness, Environmental Assessment Practitioners are legally required to engage stakeholders and Interested and Affected Parties as part of the EIA process.

The benefit of engaging the public and stakeholders can be:

- Identifying the values and needs of the public;
- Debating issues and finding solutions;
- Soliciting “hidden” knowledge of the wider community and their key concerns;
- Encouraging transparency and accountability;
- Achieving development of an integrative, inclusive nature in alignment with the principles of sustainable development.



The Development Proposal

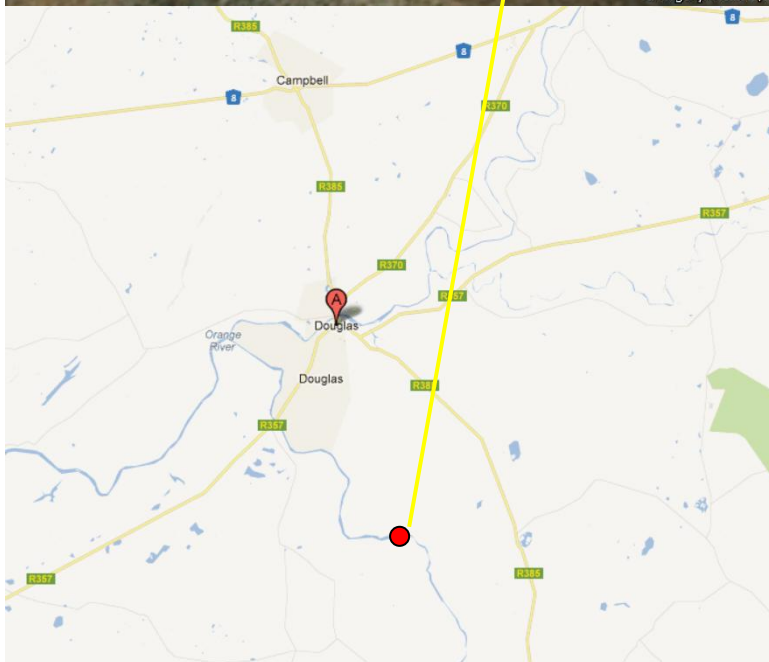
Sidala Energy Solutions (Pty) Ltd proposes to develop a hydroelectric power scheme on Portion 2 of Farm Torquay 157, Tullochgorum 158 and Portion 0 of Farm Kruisfontein 38.

This will entail:

- A weir in the river;
- A short canal with headrace, powerhouse and tailrace;
- An access road.

Environmental focus areas:

- Archaeological & Palaeontology
- Freshwater
- Terrestrial & Aquatic Fauna & Flora
- Visual & Aesthetic



Project Location



How to participate

To participate in this public participation process, please complete the following information in the table below, or email this to mark@enviroworks.co.za.

Name	
Organization	
Telephone	
Fax	
Cell	
Postal Address	
Physical Address	
Email	

Comments:

Preferred method of report receipt		(Please tick)	
Email		Web	
Electronic CD		Hard Copy	

Upon submission of the registration form to Enviroworks, you will be registered as an I&AP, and be included on an I&APs database which will ensure that you receive all future project information. Please quote the Department reference number in correspondence: 14/12/16/3/3/2/507. Please note that this participation period ends on the 12th August 2013.

The project Public Participation Practitioner is Mark Day and project reference is: **Torquay Hydro**. He can be contacted on the following details: